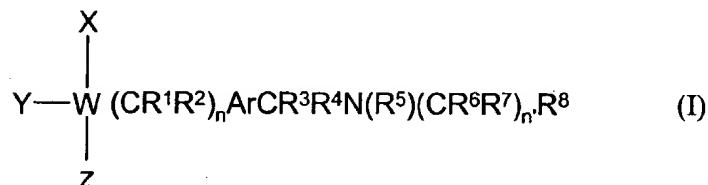


CLAIMS AMENDMENT

1. (currently amended): A compound according to Formula I:



wherein, W is a nitrogen atom and Y is void, or W is a carbon atom and Y=H;

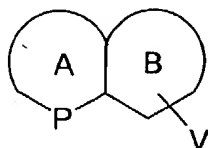
R¹ to R⁷ may be the same or different and are independently hydrogen or straight, branched or cyclic C₁₋₆ alkyl;

R⁸ is an optionally substituted heterocyclic group or an optionally substituted aromatic group

Ar is an aromatic or heteroaromatic ring optionally substituted at single or multiple, non-linking positions with electron-donating or withdrawing groups;

n and n' are independently, 0-2;

X is a group of the formula:



wherein, Ring A is an optionally substituted, saturated or unsaturated 5 or 6-membered ring, and P is an optionally substituted nitrogen atom and wherein any heteroatom in addition to P in ring A is N;

wherein Ring B is an optionally substituted 5 to 7-membered ring;

wherein Ring A or Ring B is bound to group W from any position through group V;

wherein V is a chemical bond or V is a (CH₂)_{n''} group (where n''= 1-2), or V is a C=O group; and

wherein Z is selected from the group consisting of: a hydrogen atom; an optionally substituted C₁₋₆ alkyl group; an optionally substituted aromatic or heterocyclic group; an optionally substituted amino group; an optionally substituted C₁₋₆ alkylamino or C₃₋₇ cycloalkylamino group; and an optionally substituted carbonyl group; or

the pharmaceutically acceptable acid addition salts thereof;

including wherein said compound may be in any stereoisomeric form ~~and any or~~ present as a mixture of stereoisomeric forms thereof;

wherein Ring B is selected from the group consisting of: benzene and a 5 to 7-membered cycloalkyl ring; and the optionally substituted forms thereof.

2. (previously presented): The compound of claim 1, wherein Ring A is selected from the group consisting of: pyridine; pyrimidine; pyrazine; pyridazine; triazine; piperidine; piperazine; imidazole; pyrazole; and triazole and the optionally substituted forms thereof.

3. (canceled)

3 ~~4~~ (previously presented): The compound of claim 1, wherein Ring B is selected from the group consisting of: cyclopentyl; cyclohexyl; cycloheptyl; cyclopentenyl; cyclohexenyl; and cycloheptenyl and the optionally substituted forms thereof.

5. (canceled)

4 ~~6~~ (previously presented): The compound of claim 1, wherein Ring A and Ring B together are optionally substituted dihydroquinoline or tetrahydroquinoline.

5 ~~7~~ (previously presented): The compound of claim 1, wherein Ring A and Ring B are independently optionally substituted with a substituent selected from the group consisting of: halogen; nitro; cyano; carboxylic acid; an optionally substituted alkyl, alkenyl or cycloalkyl group; an optionally substituted hydroxyl group; an optionally substituted thiol group; an optionally substituted amino or acyl group; an optionally substituted carboxylate, carboxamide or sulfonamide group; and an optionally substituted aromatic or heterocyclic group.

8-11. (canceled)

⁶
~~12.~~ (previously presented): The compound of claim 1 wherein said optional substituent in Ring A or Ring B is independently an optionally substituted aralkyl or heterocycloalkyl, wherein said heterocycloalkyl is a 5 or 6 membered ring containing 1-4 heteroatoms.

⁷
~~13.~~ (previously presented): The compound of claim 12, wherein said optionally substituted aralkyl or heterocycloalkyl is selected from the group consisting of: phenylC₁₋₄alkyl; phenylmethyl (benzyl); phenethyl; pyridinylmethyl; and pyridinylethyl.

14-50. (canceled)

⁸
~~51.~~ (previously presented): The compound of claim 1, wherein Z is an optionally substituted C₁₋₆alkyl group, wherein said C₁₋₆alkyl group is substituted with one or more substituents selected from the group consisting of: halogen; nitro; cyano; carboxylic acid; an optionally substituted alkyl, alkenyl or cycloalkyl group; an optionally substituted hydroxyl group; an optionally substituted thiol group; an optionally substituted amino or acyl group; an optionally substituted carboxylate, carboxamide or sulfonamide group; and an optionally substituted aromatic or heterocyclic group.

52-54. (canceled)

⁹
~~55.~~ (previously presented): The compound of claim 1, wherein Z is an optionally substituted aromatic or heterocyclic group or a C₁₋₆alkyl group optionally substituted with an optionally substituted aromatic or heterocyclic group.

¹⁰
~~56.~~ (previously presented): The compound of claim 55, wherein said optionally substituted aromatic group is substituted with a substituent selected from the group consisting of: benzene; naphthalene; dihydronaphthalene; and tetrahydronaphthalene; and wherein said optionally substituted heterocyclic group is a 5 to 6-membered saturated, partially saturated, or aromatic heterocyclic ring containing 1 to 4 heteroatoms selected from nitrogen, oxygen and sulfur.

4
57.

(original): The compound of claim 56, wherein said heterocyclic group is selected from the group consisting of: pyridine, quinoline, isoquinoline, imidazole, benzimidazole, azabenzimidazole, benzotriazole, furan, benzofuran, thiazole, benzothiazole, oxazole, benzoxazole, pyrrole, indole, indoline, indazole, pyrrolidine, pyrrolidone, pyrroline, piperidine, piperazine, tetrahydroquinoline, tetrahydroisoquinoline, pyrazole, thiophene, isoxazole, isothiazole, triazole, tetrazole, oxadiazole, thiadiazole, morpholine, thiamorpholine, pyrazolidine, imidazolidine, imidazoline, tetrahydropyran, dihydropyran, benzopyran, dioxane, dithiane, tetrahydrofuran, tetrahydrothiophene, dihydrofuran, and dihydrothiophene.

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58.

(previously presented): The compound of claim 57, wherein said heterocyclic group contains nitrogen or sulfur heteroatoms; and wherein said nitrogen or sulfur heteroatoms are optionally in the form of oxides.

59-97. (canceled)

13

98. (previously presented): A compound selected from the group consisting of:

- (a) AMD8862, N-(2-pyridinylmethyl)-N'-[2-[(1H-imidazol-4-ylmethyl)amino]ethyl]-N'-(5,6,7,8-tetrahydro-8-quinoliny)-1,4-benzene dimethanamine;
- (b) AMD8887, N-(2-pyridinylmethyl)-N'-[2-[(1H-imidazol-2-ylmethyl)amino]ethyl]-N'-(5,6,7,8-tetrahydro-8-quinoliny)-1,4-benzenedimethanamine;
- (c) AMD8816, N-(2-pyridinylmethyl)-N'-[2-(phenylureido)ethyl]-N'-(5,6,7,8-tetrahydro-8-quinoliny)-1,4-benzenedimethanamine;
- (d) AMD8737, N-(2-pyridinylmethyl)-N'-[[N''-(n-butyl)carboxamido]methyl]-N'-(5,6,7,8-tetrahydro-8-quinoliny)-1,4-benzenedimethanamine;
- (e) AMD8739, N-(2-pyridinylmethyl)-N'-(carboxamidomethyl)-N'-(5,6,7,8-tetrahydro-8-quinoliny)-1,4-benzenedimethanamine;
- (f) AMD8752, N-(2-pyridinylmethyl)-N'-[(N''-phenyl)carboxamidomethyl]-N'-(5,6,7,8-tetrahydro-8-quinoliny)-1,4-benzenedimethanamine;
- (g) AMD8765, N-(2-pyridinylmethyl)-N'-(carboxymethyl)-N'-(5,6,7,8-tetrahydro-8-quinoliny)-1,4-benzenedimethanamine;
- (h) AMD8715, N-(2-pyridinylmethyl)-N'-(phenylmethyl)-N'-(5,6,7,8-tetrahydro-8-quinoliny)-1,4-benzenedimethanamine;

- (i) AMD8907, N-(2-pyridinylmethyl)-N'-(1*H*-benzimidazol-2-ylmethyl)-N'-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (j) AMD8927, N-(2-pyridinylmethyl)-N'-(5,6-dimethyl-1*H*-benzimidazol-2-ylmethyl)-N'-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (k) AMD8926, N-(2-pyridinylmethyl)-N'-(5-nitro-1*H*-benzimidazol-2-ylmethyl)-N'-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (l) AMD8929, N-(2-pyridinylmethyl)-N'-[(1*H*)-5-azabenzimidazol-2-ylmethyl]-N'-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (m) AMD8931, N-(2-pyridinylmethyl)-N-(4-phenyl-1*H*-imidazol-2-ylmethyl)-N'-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (n) AMD8783, N-(2-pyridinylmethyl)-N'-[2-(2-pyridinyl)ethyl]-N'-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (o) AMD8764, N-(2-pyridinylmethyl)-N'-(2-benzoxazolyl)-N'-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (p) AMD8780, N-(2-pyridinylmethyl)-N'-(*trans*-2-aminocyclohexyl)-N'-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (q) AMD8818, N-(2-pyridinylmethyl)-N'-(2-phenylethyl)-N'-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (r) AMD8829, N-(2-pyridinylmethyl)-N'-(3-phenylpropyl)-N'-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (s) AMD8839, N-(2-pyridinylmethyl)-N'-(*trans*-2-aminocyclopentyl)-N'-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (t) AMD8726, N-[[4-[(2-pyridinylmethyl)amino]methyl]phenyl]methyl]-N-(5,6,7,8-tetrahydro-8-quinolinyl)-glycinamide;
- (u) AMD8738, N-[[4-[(2-pyridinylmethyl)amino]methyl]phenyl]methyl]-N-(5,6,7,8-tetrahydro-8-quinolinyl)-(L)-alaninamide;
- (v) AMD8749, N-[[4-[(2-pyridinylmethyl)amino]methyl]phenyl]methyl]-N-(5,6,7,8-tetrahydro-8-quinolinyl)-(L)-aspartamide;
- (w) AMD8750, N-[[4-[(2-pyridinylmethyl)amino]methyl]phenyl]methyl]-N-(5,6,7,8-tetrahydro-8-quinolinyl)-pyrazinamide;
- (x) AMD8740, N-[[4-[(2-pyridinylmethyl)amino]methyl]phenyl]methyl]-N-(5,6,7,8-tetrahydro-8-quinolinyl)-(L)-prolinamide;
- (y) AMD8741, N-[[4-[(2-pyridinylmethyl)amino]methyl]phenyl]methyl]-N-(5,6,7,8-tetrahydro-8-quinolinyl)-(L)-lysineamide;

- (z) AMD8724, N-[[4-[[[(2-pyridinylmethyl)amino]methyl]phenyl]methyl]-N-(5,6,7,8-tetrahydro-8-quinolinyl)-benzamide;
- (aa) AMD8725, N-[[4-[[[(2-pyridinylmethyl)amino]methyl]phenyl]methyl]-N-(5,6,7,8-tetrahydro-8-quinolinyl)-picolinamide;
- (bb) AMD8713, N'-Benzyl-N-[[4-[[[(2-pyridinylmethyl) amino]methyl]phenyl]methyl]-N-(5,6,7,8-tetrahydro-8-quinolinyl)-urea;
- (cc) AMD8712, N'-phenyl-N-[[4-[[[(2-pyridinylmethyl) amino]methyl]phenyl]methyl]-N-(5,6,7,8-tetrahydro-8-quinolinyl)-urea;
- (dd) AMD8716, N-(6,7,8,9-tetrahydro-5*H*-cyclohepta[b]pyridin-9-yl)-4-[[[(2-pyridinylmethyl)amino]methyl]benzamide;
- (ee) AMD8717, N-(5,6,7,8-tetrahydro-8-quinolinyl)-4-[[[(2-pyridinylmethyl)amino]methyl]benzamide;
- (ff) AMD8634, N,N'-bis(2-pyridinylmethyl)-N'-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (gg) AMD8774, N,N'-bis(2-pyridinylmethyl)-N'-(6,7,8,9-tetrahydro-5*H*-cyclohepta[b]pyridin-9-yl)-1,4-benzenedimethanamine;
- (hh) AMD8775, N,N'-bis(2-pyridinylmethyl)-N'-(6,7-dihydro-5*H*-cyclopenta[b]pyridin-7-yl)-1,4-benzenedimethanamine;
- (ii) AMD8819, N,N'-bis(2-pyridinylmethyl)-N'-(1,2,3,4-tetrahydro-1-naphthalenyl)-1,4-benzenedimethanamine;
- (jj) AMD8768, N,N'-bis(2-pyridinylmethyl)-N'-[(5,6,7,8-tetrahydro-8-quinolinyl)methyl]-1,4-benzenedimethanamine;
- (kk) AMD8767, N,N'-bis(2-pyridinylmethyl)-N'-[(6,7-dihydro-5*H*-cyclopenta[b]pyridin-7-yl)methyl]-1,4-benzenedimethanamine;
- (ll) AMD8838, N-(2-pyridinylmethyl)-N-(2-methoxyethyl)-N'-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (mm) AMD8871, N-(2-pyridinylmethyl)-N-[2-(4-methoxyphenyl)ethyl]-N'-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (nn) AMD8844, N,N'-bis(2-pyridinylmethyl)-1,4-(5,6,7,8-tetrahydro-8-quinolinyl)benzenedimethanamine;
- (oo) AMD7129, N-[(2,3-dimethoxyphenyl)methyl]-N'-(2-pyridinylmethyl)-N-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (pp) AMD7130, N,N'-bis(2-pyridinylmethyl)-N-[1-(N''-phenyl-N''-methylureido)-4-piperidinyl]-1,3-benzenedimethanamine;

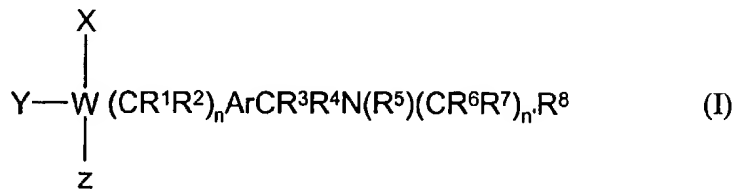
- (qq) AMD7131, N,N'-bis(2-pyridinylmethyl)-N-[N''-p-toluenesulfonylphenylalanyl]-4-piperidinyl]-1,3-benzenedimethanamine;
- (rr) AMD7136, N,N'-bis(2-pyridinylmethyl)-N-[1-[3-(2-chlorophenyl)-5-methyl-isoxazol-4-oyl]-4-piperidinyl]-1,3-benzenedimethanamine;
- (ss) AMD7138, N-[(2-hydroxyphenyl)methyl]-N'-(2-pyridinylmethyl)-N-(6,7,8,9-tetrahydro-5H-cyclohepta[b]pyridin-9-yl)-1,4-benzenedimethanamine;
- (tt) AMD7140, N-[(4-cyanophenyl)methyl]-N'-(2-pyridinylmethyl)-N-(6,7,8,9-tetrahydro-5H-cyclohepta[b]pyridin-9-yl)-1,4-benzenedimethanamine;
- (uu) AMD7141, N-[(4-cyanophenyl)methyl]-N'-(2-pyridinylmethyl)-N-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (vv) AMD7142, N-[(4-acetamidophenyl)methyl]-N'-(2-pyridinylmethyl)-N-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (ww) AMD7145, N-[(4-phenoxyphenyl)methyl]-N'-(2-pyridinylmethyl)-N-(6,7,8,9-tetrahydro-5H-cyclohepta[b]pyridin-9-yl)-1,4-benzenedimethanamine;
- (xx) AMD7147, N-[(1-methyl-2-carboxamido)ethyl]-N,N'-bis(2-pyridinylmethyl)-1,3-benzenedimethanamine;
- (yy) AMD7151, N-[(4-benzoyloxyphenyl)methyl]-N'-(2-pyridinylmethyl)-N-(6,7,8,9-tetrahydro-5H-cyclohepta[b]pyridin-9-yl)-1,4-benzenedimethanamine; and
- (zz) AMD7155, N-[(thiophene-2-yl)methyl]-N'-(2-pyridinylmethyl)-N-(6,7,8,9-tetrahydro-5H-cyclohepta[b]pyridin-9-yl)-1,4-benzenedimethanamine.

99-101. (canceled)

14
102. (previously presented): A pharmaceutical composition comprising a therapeutically effective amount of the compound of claim 1 in admixture with at least one pharmaceutically acceptable excipient.

103-118. (canceled)

15
119. (currently amended): A compound of the formula



wherein, W is a nitrogen atom and Y is void;

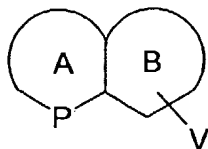
R¹ to R⁷ may be the same or different and are independently hydrogen or straight, branched or cyclic C₁₋₆ alkyl;

R⁸ is an optionally substituted heterocyclic group or an optionally substituted aromatic group

Ar is an aromatic or heteroaromatic ring optionally substituted at single or multiple, non-linking positions with electron-donating or withdrawing groups;

n and n' are independently, 0-2;

X is a group of the formula:



wherein, Ring A is an optionally substituted, saturated or unsaturated 5 or 6-membered ring, and P is an optionally substituted nitrogen atom and wherein any heteroatom in ring A or B is N;

wherein Ring B is an optionally substituted 5 to 7-membered ring;

wherein Ring A or Ring B is bound to group W from any position through group V;

wherein V is a chemical bond or V is a (CH₂)_{n''} group (where n'' = 1-2), or V is a C=O group; and

wherein Z is selected from the group consisting of: a hydrogen atom; an optionally substituted C₁₋₆ alkyl group; an optionally substituted aromatic or heterocyclic group; an optionally substituted amino group; an optionally substituted C₁₋₆ alkylamino or C₃₋₇ cycloalkylamino group; and an optionally substituted carbonyl group; or the pharmaceutically acceptable acid addition salts thereof;

including wherein said compound may be in any stereoisomeric form and any or present as a mixture of stereoisomeric forms thereof.

16
120. (previously presented): The compound of claim 119, wherein Ring A is selected from the group consisting of: pyridine; pyrimidine; pyrazine; pyridazine; triazine; piperidine; piperazine; imidazole; pyrazole; and triazole and the optionally substituted forms thereof.

17
121. (previously presented): The compound of claim 119, wherein Ring B is selected from the group consisting of: benzene and a 5 to 7-membered cycloalkyl ring; and the optionally substituted forms thereof.

18
122. (previously presented): The compound of claim 119, wherein Ring B is selected from the group consisting of: cyclopentyl; cyclohexyl; cycloheptyl; cyclopentenyl; cyclohexenyl; and cycloheptenyl and the optionally substituted forms thereof.

19
123. (previously presented): The compound of claim 119, wherein Ring A and Ring B together are optionally substituted dihydroquinoline or tetrahydroquinoline.

20
124. (previously presented): The compound of claim 119, wherein Ring A and Ring B are independently optionally substituted with a substituent selected from the group consisting of: halogen; nitro; cyano; carboxylic acid; an optionally substituted alkyl, alkenyl or cycloalkyl group; an optionally substituted hydroxyl group; an optionally substituted thiol group; an optionally substituted amino or acyl group; an optionally substituted carboxylate, carboxamide or sulfonamide group; and an optionally substituted aromatic or heterocyclic group.

21
125. (previously presented): The compound of claim 119 wherein said optional substituent in Ring A or Ring B is independently an optionally substituted aralkyl or heterocycloalkyl, wherein said heterocycloalkyl is a 5 or 6 membered ring containing 1-4 heteroatoms.

22
126. (previously presented): The compound of claim 125, wherein said optionally substituted aralkyl or heterocycloalkyl is selected from the group consisting of: phenylC₁₋₄alkyl; phenylmethyl (benzyl); phenethyl; pyridinylmethyl; and pyridinylethyl.

²³
~~127~~. (previously presented): The compound of claim ¹⁵~~119~~, wherein Z is an optionally substituted C₁₋₆alkyl group, wherein said C₁₋₆alkyl group is substituted with one or more substituents selected from the group consisting of: halogen; nitro; cyano; carboxylic acid; an optionally substituted alkyl, alkenyl or cycloalkyl group; an optionally substituted hydroxyl group; an optionally substituted thiol group; an optionally substituted amino or acyl group; an optionally substituted carboxylate, carboxamide or sulfonamide group; and an optionally substituted aromatic or heterocyclic group.

²⁴
~~128~~. (previously presented): The compound of claim ¹⁵~~119~~, wherein Z is an optionally substituted aromatic or heterocyclic group or a C₁₋₆alkyl group optionally substituted with an optionally substituted aromatic or heterocyclic group.

²⁵
~~129~~. (previously presented): The compound of claim ²⁴~~128~~, wherein said optionally substituted aromatic group is substituted with a substituent selected from the group consisting of: benzene; naphthalene; dihydronaphthalene; and tetrahydronaphthalene; and wherein said optionally substituted heterocyclic group is a 5 to 6-membered saturated, partially saturated, or aromatic heterocyclic ring containing 1 to 4 heteroatoms selected from nitrogen, oxygen and sulfur.

²⁶
~~130~~. (previously presented): The compound of claim ²⁵~~129~~, wherein said heterocyclic group is selected from the group consisting of: pyridine, quinoline, isoquinoline, imidazole, benzimidazole, azabenzimidazole, benzotriazole, furan, benzofuran, thiazole, benzothiazole, oxazole, benzoxazole, pyrrole, indole, indoline, indazole, pyrrolidine, pyrrolidone, pyrroline, piperidine, piperazine, tetrahydroquinoline, tetrahydroisoquinoline, pyrazole, thiophene, isoxazole, isothiazole, triazole, tetrazole, oxadiazole, thiadiazole, morpholine, thiamorpholine, pyrazolidine, imidazolidine, imidazoline, tetrahydropyran, dihydropyran, benzopyran, dioxane, dithiane, tetrahydrofuran, tetrahydrothiophene, dihydrofuran, and dihydrothiophene.

²⁷
~~131~~. (previously presented): The compound of claim ²⁶~~130~~, wherein said heterocyclic group contains nitrogen or sulfur heteroatoms; and wherein said nitrogen or sulfur heteroatoms are optionally in the form of oxides.

²⁸
~~132.~~ (previously presented): A pharmaceutical composition comprising a therapeutically effective amount of the compound of claim ~~119~~¹⁵ in admixture with at least one pharmaceutically acceptable excipient.

²⁹
~~133.~~ (previously presented): The compound of claim 1, wherein Z is a C₁₋₆ alkyl group substituted with an optionally substituted aromatic or heterocyclic group.

³⁰
~~134.~~ (previously presented): The compound of claim ~~119~~¹⁵, wherein Z is a C₁₋₆ alkyl group substituted with an optionally substituted aromatic or heterocyclic group.